The average total cost of hospitalization per delayed group patient was $US11,337 (95% CI $9,217–$13,943). The cost of initial hospitalization and interval anticoagulation per delayed group patient was estimated to be $US3,119. The estimated total cost of treatment per patient in the early and delayed groups, respectively, was $US13,791 and $US14,455.
CONCLUSION: This study suggests that early CEA can be performed with acceptable perioperative morbidity rates in selected non-disabling stroke patients. Decreasing the length of the SSI decreases the recurrent stroke risk and interval anticoagulation resource utilization.

CVA2

COST-EFFECTIVENESS AND ECONOMIC EFFICIENCY: THE CASE OF STATIN THERAPY IN SECONDARY PREVENTION OF CORONARY HEART DISEASE

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Health-care case management places pressure on decision makers to adopt treatment strategies that promote economic efficiency and hence profitability. Traditional cost-effectiveness analysis (CEA), where the objective is to calculate cost-effectiveness ratios, can better inform decision making in markets where prices and efficacy vary widely. However, the threshold at which a given therapy becomes economically efficient relative to competing therapies is not evident from cost-effectiveness ratios alone.
OBJECTIVE: To illustrate the use of spatial techniques for identifying efficient treatment options, using statin therapy in secondary prevention of coronary heart disease (CHD) as a case study.
METHODS: We used a Markov model of CHD epidemiology and treatment to estimate cost-effectiveness of 13 statin regimens versus no therapy in secondary prevention of CHD. Comparative efficacy was assessed using data from a recent trial (CURVES) that included these regimens. Patients were assumed to have a history of CHD with risk factors similar to those observed in the trial. CHD event risk was estimated using new subsequent-event risk equations from the Framingham Heart Study. Effectiveness was measured alternatively as gain in life expectancy and CHD events averted.
RESULTS: At usual starting doses, atorvastatin therapy provided the largest life expectancy gain and CHD event avoidance at the lowest cost per life-year gained ($12,900 and $23,400 for men and women, respectively), followed by simvastatin ($17,700 and $31,700), lovastatin ($18,800 and $33,700), pravastatin ($22,600 and $40,200), and fluvastatin ($23,800 and $42,000). Any desired level of effectiveness can be obtained at lowest cost with atorvastatin.
CONCLUSION: Economic efficiency is enhanced when atorvastatin is used to treat some or all patients requiring statin therapy in secondary prevention of CHD.

CVA3

ADHERENCE TO HYPERTENSION THERAPY: THE EFFECT OF INITIAL DRUG CHOICE

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Clinical trials of antihypertensive medications have generally found good efficacy and similar safety among the many available agents. However, non-experimental studies of hypertension have often found that a large proportion of hypertensive patients remain uncontrolled, perhaps due to lack of adherence with therapy. The results of clinical trials, therefore, may not entirely accord with the realities of hypertension treatment.
OBJECTIVE: To determine if adherence with antihypertensive therapy depends on the initial drug prescribed.
METHODS: A large database (over 3 million drug dispensings) containing information on 79,591 hypertensive patients in Saskatchewan, Canada, was used to analyze the patterns of drug therapy. The medication regimen, including changes and lack of adherence (temporary and permanent), was deduced from information on hospitalizations, pharmacological information on each agent (e.g., minimum daily dosage), and drug dispensings. Kaplan-Meier survival analysis was used to compare cumulative persistence rates. Cox regression was used for controlled analysis.
RESULTS: Among 22,198 newly diagnosed hypertensive patients, over 20% discontinued medication within the first year. The rates varied by initial drug class, from 26% among patients beginning with a diuretic to 17% when an angiotensin converting enzyme inhibitor was used first ($p > 0.001$). This divergence remained significant when controlling for baseline differences among the groups in age, sex, and prior level of medicalization. Changes in the therapeutic regimen were also associated with increasing levels of discontinuation ($p < 0.05$).
CONCLUSION: These results suggest that the choice of initial drug, and changes made to the therapeutic regimen, may be important determinants of patient adherence to therapy. In this case, physicians should consider results of actual practice studies, together with clinical trial results, in making therapeutic choices.

CVA4

WITHDRAWN